DEPARTMENT OF THE ARMY HEADQUARTERS, U.S. ARMY MATERIEL COMMAND 5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333 - 0001 February 25, 1994

et No. <u>030 - 2974</u>

MLER-RI - 94-11

REPLY TO ATTENTION OF

U.S. Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, Pennsylvania 19406-1415

Dear Sir/Madam:

Enclosed is a report of an incident involving Army radioactive commodities that occurred at Fort Gordon, GA in January 1994. The commodities were licensed under U.S. Nuclear Regulatory Commission License 29-01022-14, issued to the U.S. Army Communications-Electronics Command, Fort Monmouth, New Jersey.

We concur with the findings in the report.

Point of contact is Mr. John Manfre, (703) 274-9340.

Sincerely,

John E. Rankin

Chief

Safety Office

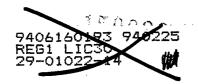
Enclosure

Copy Furnished:

Commander, U.S. Army Communications-Electronics Command, ATTN: AMSEL-SF, Fort Monmouth, NJ 07703-5000

Commander, U.S. Army Training & Doctrine Command, ATTN: ATOS.

Fort Monroe, VA 23651



1994 MAR RETURN ORIGINAL TO REGION I /X30

DEPARTMENT OF THE ARMY



HEADQUARTERS. US ARMY COMMUNICATIONS-ELECTRONICS COMMAND AND FORT MONMOUTH FORT MONMOUTH, NEW JERSEY 07703-5000



AMSEL-SF-RER

11 February 1994

MEMORANDUM THRU Commander, U.S. Army Materiel Command, ATTN:

AMCSF-P, 5001 Eisenhower Avenue, Alexandria,

VA 22333-0001

FOR U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, PA 19406-1415

SUBJECT: Fire Involving MX-7338/PDR-27() Radioactive Test Samples

1. References:

- a. U.S. Nuclear Regulatory Commission (NRC) Material License Number 29-01022-14, Docket Number 030-29741.
- b. FONECON, 19 January 1994, between Mr. Richard Lovell, our office, and Mr. John Manfre, U.S. Army Materiel Command, subject as above (SAB).
- c. FONECON, 19 January 1994, between Mr. Richard Lovell, and Mr. John Houpt, Fort Gordon, GA, Radiation Protection Officer (RPO), SAB.
- d. FONECON, 19 January 1994, between Mr. Richard Lovell, and Dr. Shambecki, NRC, Region I, SAB.
- e. FONECON, 24 January 1994, between Mr. Richard Lovell, and Mr. John Houpt, Fort Gordon, GA, RPO, SAB.
- 2. Reference 1a license, issued to this command, authorizes the possession and use of the MX-7338/PDR-27() Radioactive Test Samples by the Department of the Army. Reference 1d informed the NRC, Region I, of a fire involving two (2) each test samples and that a report would be forthcoming, following an investigation.
- 3. In accordance with Title 10, Code of Federal Regulations, Part 20.2201, no written report is necessary, based upon the 10-millicurie (mCi) reporting-limit for Krypton-85, and the maximum possible activity of 7.724 mCi involved in this incident. However, due to the uncommon circumstances surrounding the fire event, we feel obligated to provide you with the following information concerning the destruction of two each test samples.

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- 4. The MX-7338/PDR-27() Radioactive Test Sample contains 5 mCi (assay date: August 1989) of Krypton-85 gas inside a five inch aluminum wand-shaped source configuration. The Radioactive Test Sample is used to check the functional operation of the AN/PDR-27() standard Army beta-gamma radiation detection instrument (Radiac Set). The AN/PDR-27() Radiac Set is comprised of a metal carrying case housing the radiation detection instrument, the MX-7338/PDR-27() Radioactive Test Sample, Geiger-Mueller tubes and other ancillary components.
- 5. Reference 1b and 1c FONECONS informed this command of a building fire which involved two each MX-7338/PDR-27() Radioactive Test Samples inside their respective AN/PDR-27() Radiac Set cases. The building fire, which occurred on 16 January 1994, completely destroyed building 20805 located at Fort Gordon, GA. Due to the suspect nature of the fire, possibly arson, access was limited to the perimeter of the fire area. On 19 January 1994 perimeter radiation survey readings indicated no readings above background using an Eberline ESP-2 Smart Survey Meter with a sodium iodide (NaI) probe nor did wipe tests reveal any radioactive material contamination at the fire area perimeter.
- 6. As discussed in reference 1e, a radiation survey was conducted of the building fire location on 24 January 1994. Two each AN/PDR-27() Radiac Set carrying cases were located and surveyed with an Eberline ESP-2 Smart Survey Meter with a NaI probe. No Gamma radiation readings were detected above background inside or outside of the cases, nor in the area surrounding the carrying cases. Due to the extreme temperature of the fire, the carrying cases were partially melted and the contents, including the MX-7338/PDR-27() Radioactive Test Samples, completely destroyed.
- 7. Preliminary investigative reports from the Fort Gordon Criminal Investigation Division (CID) reveal that:
- a. At 1940 hours, 16 January 1994, the Military Police Station, Fort Gordon, GA (FGG) was notified of a fire at building 20805, FGG. Preliminary investigation revealed that the 63rd Signal Battalion Motor Pool (Building 20805) and equipment caught fire by unknown means resulting in extensive losses/damages. There was an estimated 16 Signal/Combat vehicles and combat gear inside the building at the time of the fire. The building and equipment had been determined a total loss to the US Government in excess of \$5,000,000.00.

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SUBJECT: Fire Involving MX-7338/PDR-27() Radioactive Test Samples

- b. Between 20 and 23 January 1994, an examination of the crime scene was conducted by CID, with the assistance of fire inspectors from the Department of Alcohol, Tobacco and Firearms (ATF), Savannah, GA. At the conclusion of the examination, it was determined that the fire was intentional due to arson.
- Exposure calculations resulting from the release of Krypton-85 in the fire were not considered due to the negligible exposure associated with this incident. Additionally, emergency response personnel were not able to approach the burning building within any distance which would have allowed exposure to 10 mCi of Krypton-85.
- It is noteworthy to mention that this is an isolated incident that is still being investigated by the CID and ATF. The cause of the fire is deemed suspicious and is under formal investigation.
- Based upon the above, no further actions will be taken unless directed by the NRC.
- 11. Our Point of Contact in this regard is Mr. Richard Lovell, (908) 544-3112.

CECOM Bottom Line: THE SOLDIER.

Chief # Safety Office

CF:

Cdr, TRADOC, ATTN: ATOS

Cdr, US Army Signal Center and Fort Gordon, ATTN: ATZH-IS

GUE & 1- EN 15.

REGION I <u>NMSS LICENSEE EVENT REPORT</u>

		License No. 29-01022-14
		Docket No. <u>030 - 29741</u>
_		MLER-RI 94-11
1.	ACTION CONTROL DATA	
٠	Licensee Dept. of the	Amy
	Licensee Dept. of the Event Description Fire INVOIVE	ing RAM
	Event Date 1-16-94	Report Date 2-25-94
2.	REPORTING REQUIREMENT QO.2201	
,	() 10 CFR 20.402 Theft or Loss () 10 CFR 30.50 Immediate/24 Hr. Notification Report	() License Condition() 10 CFR 20.405 30 Day Report
	(1) Other NONC	20.2203
3.	REGION I RESPONSE	
	() Immediate Site Inspection	Inspector/Date
	() Special Inspection	Inspector/Date
	() Telephone Inquiry	Inspector/Date
	() Preliminary Notification	() Daily Report
	(1) Information entered on the Regio	· · · · · · · · · · · · · · · · · · ·
	(WReview at next routine inspection	
	() Report referred to	
4.	REPORT EVALUATION	
	() Description of event	() Corrective actions
	() Levels of RAM involved	() Calculation adequate
	(Cause of event	() Letter to licensee requesting
		additional information
	Completed by Jan Jul	Date 4-1-94
	Reviewed by E Illu	Date 5/17/94

5. SPECIAL INSTRUCTIONS OR COMMENTS